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10/532,760

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EXAMINER

ALI, MOHAMMAD M

ART UNIT

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3744

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/532,760 | Applicant(s) LOPEZ, MARIO | |
| | Examiner MOHAMMAD M. ALI | Art Unit 3744 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 14-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5-10, 14-16 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Renzo et al., (EP 0542055 A1). Renzo et al., disclose a device comprising controlled cooling of grapes before being subjected to pressing and/or stalk stripping (see column 5, lines 21-23; indicating a step of transporting the grapes to a press or to a maceration vessel, 1) inside a connection line (11) having a belt lines (16 and 17); charging the grapes with carbon dioxide from a tank 27 (see line 25 is connected to a high pressured CO₂ tank 25 at the bottom indicating that liquid CO₂ is connected with pipe 25 as it is a known feature in a pressurized CO₂ tank liquid portion remains at the bottom side and the gas portion remains at the top side) by opening one or more valves (6) during transport via the cooling chamber 4A and 4B; a harvest reception vessel (inherent at the entry point of cooling chamber 4A (loading zone 2); a connection line to harvest reception vessel (inherent as the harvest to be loaded at the loading zone 2); a connection to the press (inherent because the press is performed after the cooling operation as disclosed above); each of the connection lines including conveyor 16, 17 being configured for transporting the grapes wherein at least one feed line (loading zone 2) is provided to feed grapes to closed part connection line (11) into which carbon dioxide is fed; a reservoir/tank contains both liquid and gaseous carbon

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dioxide (it is inherent a liquid carbon dioxide cylinder is topped by gaseous carbon dioxide); a gaseous carbon dioxide is brought into contact with grapes (as there is nozzles 6 and 21 it inherent that gaseous (after spray from nozzles 6 CO₂ liquid becomes gaseous carbon dioxide is brought into contact of the grapes); the grapes moves through movable door 60 as a grape movement valve and then through metering member 14 being another valve ; temperature sensors or probes 33, 72 and 75 for detecting temperatures of grapes; a control circuit 34 controls the temperature of grapes with the help of temperature sensors and carbon dioxide and operation of fans 30 and nozzles 6/21; one or more valves 58 for movement of carbon dioxide; the charging of carbon dioxide is interrupted (flow of CO₂ is controlled by the electronic controller 34 as it is connected with temperature sensors 33, CO₂ control valves 58 and fans 30 so that the grapes are cooled to a predetermined temperature for example 5 degree C; See column 4, lines 1-12).. Regarding 7 degree C, Renzo et al., do not specifically say that cooling degree should be 7 degree C but range of cooling degree as mentioned by Renzo et al. is 0-15 degree C which is known by the Applicant as mentioned in his arguments. It clearly indicates that Renzo et al., is able to maintain the cooling temperature at any point between 0-15 degrees C which includes 7 degree C and Renzo et al., also disclose that a further object to provide a device which enables said steeping to be conducted at different temperature in selective and controlled manner, independently of initial grape temperature and on the basis of grape quality. And on this basis of grape quality Renzo et al., set a selective temperature of 5 degree C out of his temperature range 0 to 15 degree C. Therefore, on the basis of some other grape

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quality which needs to set a selective temperature of 7 degree C Renzo et al., is able to select the temperature at 7 degree C out of his temperature range 0 to 15 degree C.

Therefore, Renzo et al., is capable of maintaining 7 degree C by interrupting the flow of CO2 as and when necessary. See Fig. 1-4, abstract, column 2, line 41 to column 6, line

4. Regarding maceration process lasts only a few hours for claim 1 being a well known feature in the art and the applicant also admitted this fact in the description of

specification in page 1, (lines 15-17). However, the maceration lasts a few hours is a

known feature in the art. As for further evidentiary example for process for the

production of juices from fruits and vegetables a maceration time is needed for one

hour. See column 5, lines 49-51 of US Patent 6,465,026 B2 to Grassin et al.

Regarding new claims 19 and 20, Renzo discloses that one or more temperature measuring devices (33) measures the temperature of grapes in the connection line (11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 5-10, 14-16 and 18 are rejected under 35 U.S.C. 103(a) as being anticipated by Renzo et al., (EP 0542055 A1). Renzo et al., disclose a device comprising controlled cooling of grapes before being subjected to pressing and/or stalk

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stripping (see column 5, lines 21-23; indicating a step of transporting the grapes to a press or to a maceration vessel); charging the grapes with carbon dioxide from a tank 27 (see line 25 is connected to a high pressured CO₂ tank 25 at the bottom indicating that liquid CO₂ is connected with pipe 25 as it is a known feature in a pressurized CO₂ tank liquid portion remains at the bottom side and the gas portion remains at the top side) during transport via the cooling chamber 4A and 4B; a harvest reception vessel (inherent at the entry point of cooling chamber 4A (loading zone 2); a connection line to harvest reception vessel (inherent as the harvest to be loaded at the loading zone 2); a connection to the press (inherent because the press is performed after the cooling operation as disclosed above); each of the connection lines including conveyor 16, 17 being configured for transporting the grapes wherein at least one feed line (loading zone 2) is provided to at least one of the connection lines 25 through which carbon dioxide is fed into the connection line (11, a closed part) where conveyors (16/17) are running; a reservoir/tank contains both liquid and gaseous carbon dioxide (it is inherent a liquid carbon dioxide cylinder is topped by gaseous carbon dioxide); a gaseous carbon dioxide is brought into contact with grapes (as there is nozzles 6 and 21 it inherent that gaseous (after spray from nozzles 6 CO₂ liquid becomes gaseous carbon dioxide is brought into contact of the grapes); the grapes moves through movable door 60 as a grape movement valve and then through metering member 14 being another valve ; temperature sensors or probes 33, 72 and 75 for detecting temperatures of grapes; a control circuit 34 controls the temperature of grapes with the help of temperature sensors and carbon dioxide and operation of fans 30 and nozzles 6/21; one or more

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valves 58 for movement of carbon dioxide; the charging of carbon dioxide is interrupted (flow of CO₂ is controlled by the electronic controller 34 as it is connected with temperature sensors 33, CO₂ control valves 58 and fans 30 so that the grapes are cooled to a predetermined temperature for example 5 degree C; See column 4, lines 1-12). Renzo et al., disclose the invention substantially as claimed as stated above except cooling to 7 degrees C. Regarding 7 degree C, Renzo et al., do not specifically say that cooling degree should be 7 degree C but range of cooling degree as mentioned by Renzo et al. is 0-15 degree C which is known by the Applicant as mentioned in his arguments.

The general concept of selecting a set cooling temperature for grapes before the grape is taken to a press or maceration process fall within the realm of common knowledge as obvious mechanical expedient and this is illustrated by Renzo et al., in which Renzo et al., teach the use of a set cooling temperature of 5 degree set temperature (See column 2, lines 6-11; on the basis of grape quality out of the temperature range 0 to 15 degree C (See column 1, lines 53-58) , column 4, lines 6-12). Therefore, it is obvious that Renzo et al., select a set cooling temperature of grapes at 7 degree C on some other grape quality.

It indicates that Renzo et al., is able to maintain the cooling temperature at any point between 0-15 degrees C which includes 7 degree C and hence Renzo et al., is obviously capable of maintaining 7 degree C by interrupting the flow of Co₂ as and when necessary. See Fig. 1-4, abstract, column 2, line 41 to column6, line 4. Regarding maceration process lasts only a few hours for claim 1 being an alternative option to

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press; the Examiner does not have to address the implication of this amendment portion. However, the maceration lasts a few hours is a known feature in the art. As for evidentiary example for process for the production of juices from fruits and vegetables a maceration time is needed for one hour. See column 5, lines 49-51 of US Patent 6,465,026 B2 to Grassin et al.

Regarding claims 3 and 4, Renzo et al., do not specifically disclose if a liquid or solid carbon dioxide is brought into contact with grapes. However, for cooling grapes or any fruit by a cryogenic means like either gaseous or solid carbon dioxide is known feature in the art. Moreover, an ordinary skill of art is able to utilize the control circuit 34 to obtain flow of either a gaseous or liquid carbon dioxide on the grapes. Therefore, it is an obvious choice of an ordinary skill of art to choose gaseous or liquid carbon dioxide or solid carbon dioxide for cooling purposes of grapes or the like. The cooling of grapes can be done by using dry ice pellets (solid carbon dioxide) is a known feature. For evidentiary example see Applicant's IDS EP 1096005 A1 to Robert et al., Para [0021]. And also for further evidentiary reference US Patent 4,615,887 to Hickinbotham (see claim 13).

Response to Arguments

Applicant's arguments filed 03/23/09 have been fully considered but they are not persuasive. The Applicant argues that Renzo is directed to an open system, where the grapes are put in a room large enough to house and provide space for workers to work. It means that the grapes are placed in chambers (4A and 4B) are open system and

carbon dioxide is released into this open chamber and also worker are working in this chamber. The Examiner disagrees.

Chamber 4A is a grape transporting zone by using mobile belts 16 and 17 (See column 3, line 5) and both chamber 4A and 4B is a closed part 11 (See column 3, line 3). The chamber 4B is a lacerating chamber where two rollers 14 are rolling for lacerating and pressing purposes. In both the chambers carbon dioxide is sprayed by nozzles and fans 30 are placed there. Therefore, there is no question that workers are working in these chambers where belts are running and carbon dioxide is being sprayed. Therefore, the above argument of the Applicant is not true and acceptable.

The Applicant further argues that independent claims 1, 6 and 7 recite that the carbon dioxide flow is shut off if the temperature falls below 7 degree C. It indicates that Renzo does not disclose interrupting the flow of carbon dioxide if the temperature drops below 7 degree C as it recited in the present claims. The Examiner disagrees.

As Renzo et al., disclose an electronic controller/processor 34 connecting temperature sensors 33, 75, CO2 control valves 58, and fans 30 and controlling the temperature between 0-15 degree C with example of 5 degree C, Renzo et al., is capable of interrupting the flow of carbon dioxide if the temperature drops below 7 degree C and thus Renzo et al., obviously read claim 3 and 4. Therefore, Renzo does not disclose interrupting the flow of carbon dioxide if the temperature drops below 7 degree C as it recited in the present claims is not true and rejections are true.

The Applicant further argues that Renzo does not test the actual temperature of grapes. Instead, Renzo tests the ambient air temperature in the room in which grapes

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are being cooled, see sensors 33 in Fig. 1. This is another difference between Renzo and the presently claimed invention. The Examiner disagrees. Renzo is controlling the temperature and maintaining a desired temperature including the claimed temperature of 7 degree C by sensing the temperature with the sensors 33 and controller 34 in closed chamber (11) as shown in Figs 1, 2 and 4.

Therefore, the above argument of the Applicant is not based on facts and acceptable.

The Applicant further argues that there is no disclosure anywhere in Renzo to stop the cooling process if the temperature of grapes drops below 7 degree C and Renzo does not differentiate between a warm 15 degree C and an icy 0 degree C. The Examiner disagrees.

Renzo controls the desired temperature in the closed chambers 4A and 4b including halting the flow of cryogenic fluid whenever developing any problem. See column 5, lines 41-48. It clearly indicates Renzo et al controls the cooling process by the help of sensors 33 and controller 34 and able to stop the cooling process if the temperature of grapes drops below 5 degree C in as discussed above to have one specific cooling temperature of 5 degree C out of the cooling range 0-15 degree C because to achieve the temperature by stopping the flow of cryogen adds multifold benefit. First benefit stopping of cryogen flow saves the costly material and the second benefit to still achieve the desired temperature third to save the wearing tearing of nozzle and so on. Therefore, Renzo et al is capable to stop the cooling process if the temperature falls below 7 degree C to have another specific cooling temperature 7

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degree C out of the cooling range 0-15 degree C. Therefore, Renzo differentiate a temperature of 5 degree C between a warm temperature 15 degree C and icy 0 degree C.

Therefore, the above argument of the Applicant is not true and acceptable.

The Applicant further argues that Renzo teaches a preferred temperature that is outside of the claimed methodology. The Examiner disagrees. Renzo is teaching temperature range 0-15 degree C and specifically shows how to maintain 5 degree C because 5 degree falls within the temperature range of 0-15 degree C as discussed above. It clearly indicates that Renzo is capable of maintain any temperature which fall within the range 0-15 degree C. Therefore, Renzo is able to maintain a temperature of 7 degree C because this temperature also falls within the range of 0-15 degree C. Therefore, the above argument of the Applicant is also not true and acceptable.

The Applicant further argues that a skilled artisan have no reason to modify the teachings of the Renzo reference, to interpret the charging with the carbon dioxide it the temperature of the grapes falls below 7 degree C, as required of the present claims. The Examiner disagrees. A skilled artisan is taught enough to learn how to maintain a 5 degree C out of a range 0-15 degree C. Therefore, a skilled artisan has every reason and skill with the above teaching of Renzo maintain 7 degree C being easy because the 7 degree falls within the range 0-15 degree C.

Therefore, the above argument of the Applicant is not based on truth and acceptable.

The Applicant further argues that Renzo does not teach a shortened maceration time as is presently claimed. The Applicant further mentioned that apple juice cannot be processed for making wine. The Examiner disagrees.

Renzo definitely maintains a laceration time which may also be the time of claimed invention. However, laceration time of claimed invention is well known and specifically taught by Grassin et al as discussed in the Office action. Making wine and maceration time is two different things. Because maceration time may vary but still man can produce the wine with different maceration time. Grassin et al taught a maceration time of claimed invention to produce apple juice which can be converted to wine too and it is well known in the market.

Therefore, the above argument of the Applicant is also not true and acceptable.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD M. ALI whose telephone number is (571)272-4806. The examiner can normally be reached on maxiflex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4808. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mohammad M Ali/
Primary Examiner, Art Unit 3744